#### DEPARTMENT OF HEALTH SERVICES

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May 1994

TO : DISTRICT AND COUNTY SUPERINTENDENTS

SUBJECT : ADVISORY - CHILDHOOD LEAD POISONING PREVENTION AND

PUBLIC ELEMENTARY SCHOOLS, PRESCHOOLS, AND CHILD

**CARE CENTERS** 

NOTE :

THE GUIDANCE IN THIS ADVISORY IS NOT BINDING ON LOCAL EDUCATIONAL AGENCIES OR OTHER ENTITIES. EXCEPT FOR THE STATUTES, REGULATIONS, AND COURT DECISIONS THAT ARE REFERENCED HEREIN, THIS ADVISORY IS EXEMPLARY, AND COMPLIANCE WITH IT IS NOT MANDATORY.

(See Education Code Section 33308.5.)

In recent years, public concern has increased about children's exposure to environmental toxins, with significant emphasis on the effect of lead on the health and development of children. As with other potentially harmful substances, concern has grown that our children possibly are being exposed to lead in public schools. Anticipating this concern, Assembly Member Jackie Speier authored and Governor Pete Wilson signed AB 1659, the "Lead-Safe Schools Protection Act", calling for the Department of Health Services to investigate the extent of lead hazards present in California's public elementary schools, childcare facilities, and preschools (Education Code, Section 32240 et seq.). Under this legislation, school personnel and parents of children in schools that have been found to contain lead hazards will be informed about risks of lead exposure and ways both to reduce those risks and ameliorate associated health and developmental problems.

The Department of Health Services will survey a sample of schools throughout California to determine the extent of existing lead hazards. The results of the survey, scheduled to begin in the fall of 1994, will enable the Department to provide guidance on how to test for lead and how to assess and reduce lead hazards in schools. The study, including analysis of the results and development of recommendations, will take approximately one and one-half years to complete. In the meantime, this advisory is intended to provide interim guidance to California schools on reducing lead hazards in everyday maintenance and operations and avoiding increased hazards with renovation, retrofitting and remodeling activities.

#### INTRODUCTION: LEAD AND CHILDREN

All environments are contaminated to some degree with lead from its past use in paint and motor fuels and from some industrial sources, and everyone is exposed to some lead every day in food, air and water. When young children are exposed to additional, more concentrated sources of lead (such as lead in paint, soil, pottery, some folk remedies, or lead brought home from work on the clothing, shoes, or hands of an adult), they may become lead poisoned. Childhood lead poisoning has been identified as a serious problem for many decades. The scientific community has continued to refine research techniques and has discovered that lead causes adverse health and developmental effects at levels previously believed to be safe. In 1991, federal health officials characterized lead poisoning as the "most common and societally devastating environmental disease of young children" (Strategic Plan for the Elimination of Childhood Lead Poisoning, U.S. Department or Health and Human Services, February 1991).

Children under the age of six are particularly at risk from lead exposure because they explore their environment at ground level, with their mouths and hands, and are likely to ingest lead dust, paint chips, or lead-contaminated soil that is present. Further, young children absorb more of the lead they ingest than older children or adults, and their developing brains and nervous systems are very vulnerable to lead's toxic effects. Once children are of elementary-school age, they are biologically less susceptible, their high-risk exploratory behavior usually diminishes, and so they are at significantly lower risk of becoming lead-poisoned.

Of a group of children in a given environment exposed to the same sources of lead, some may become poisoned and some may not. The likelihood that a child will become lead poisoned depends on a number of factors including overall physical and nutritional health status and behavior. Because there are so many sources of lead in the environment and because even children with severe lead poisoning can have no symptoms, medical and public health authorities have recommended widespread blood testing of children six months through six years of age for lead poisoning. The U.S. Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics and the California Medical Association all support blood lead testing of very young children. California has promoted testing young children for lead since the mid-1980s, and lead poisoning is one of the conditions which must be reported to health authorities. As more young children have been tested, more lead poisoning has been found. The goal, of course, is to prevent lead poisoning in the first place.

### THE ROLE OF SCHOOLS IN PREVENTING LEAD POISONING

California's schools have an important role to play in preventing lead poisoning of very young children. Following are some steps schools can take and some issues of which they should be aware.

1. Schools should be mindful that there may be lead paint hazards inside and outside buildings in public elementary schools, preschools, and childcare facilities. As it ages and is disturbed, leaded paint (especially when it has been used on the moving parts of windows or door frames that receive hard use) can break down into small particles which mix with dust. This dust can contaminate the interior areas of the school or the soil and

asphalt near the walls of the building. Until the Department of Health Services completes a survey of schools, it is best to assume that there is leaded paint both in the interior and on the exterior of schools. The age of the school building is, of course, a factor. In 1977, the federal Consumer Product Safety Commission banned the use of leaded paint in residences, schools, and other buildings where consumers have direct contact with painted surfaces. In schools built after 1978, therefore, there very likely is reduced risk of lead from paint. Schools may wish to check their maintenance records to ascertain the painting history of the buildings. Leaded paint meant for other uses may have been used in schools inadvertently even since 1978.

- 2. The safest course is not to disturb the paint in any way during normal maintenance and operations.
  - o Never sand, burn, or scrape paint unless it is known that the paint contains no lead.
  - o Normal maintenance should emphasize control of dust. Clean up dust using a high phosphate detergent for regular wet mopping of floors, wiping of window wells and ledges, and washing of surfaces. Dry sweeping and use of vacuum cleaners not designed for use with toxic dusts are not appropriate cleaning methods when lead dust may be present.
- 3. Before beginning renovation or remodeling, schools should evaluate the potential lead hazards and ensure that any work which is done does not create an additional hazard by increasing lead in dust and debris. If there is obviously peeling or flaking paint, or if remodeling or renovation is necessary, a potentially significant hazard exists or may be created for children and adults, including workers, in the school.
  - o It is of utmost importance that contractors and workers comply with federal Housing and Urban Development guidelines and with California's occupational safety and health lead standard (Construction Safety Orders, Title 8, California Code of Regulations, Section 1532.1) to ensure that no one in or near the building under construction --including the workers themselves -- is exposed to lead.
  - o Children should not be allowed in or near school buildings in which renovation activities may create lead dust.
  - o Since dust containing lead is the biggest hazard from this kind of work, contractors and workers must take measures to minimize and clean up the dust produced while they are working and must contain dust within the construction area. Workers should wash their hands and face (and shower if possible) and should change their work clothes and shoes as they leave the construction area for other parts of the school (or their homes).

- o Workers must handle and dispose of all lead waste and debris in accordance with state law.
- 4. Lead hazard reduction must be done by trained, competent workers. The Department of Health Services soon will issue regulations that will establish a program to certify residential, public, and commercial structure lead abatement inspectors, contractors, and workers. Subsequent to the State's implementation of this program, schools are required to use trained and state-certified contractors, inspectors, and workers when any action to abate existing risk factors for lead is undertaken (Education Code, Section 32243(b)). It is the school's responsibility to ascertain that lead abatement personnel are state-certified. Information about the availability of state-certified lead abatement personnel in specific regions of the state will be provided in the near future.
- 5. Refer to previous advisories from the Departments of Health Services and Education (December 18, 1987; March 10, 1988; and June 26, 1989) for information on lead in school drinking water fountains. (These advisories are available from the Department of Education School Facilities Planning Division at (916) 322-2470.) These advisories and more recent federal rulings on quality of water from municipal water sources recommend a number of steps, from monitoring the amount of lead in water to corrective action when necessary. The best source of information on quality of water in a given school is the company or agency delivering the school's water supply.
- 6. When ordering or purchasing arts and crafts supplies for use in elementary school classrooms, be aware that these supplies can contain lead. In ordering materials, be sure to avoid those which bear the Proposition 65 toxic substances warning label and/or which appear on the list of toxic materials prohibited by Education Code Section 32064.
- 7. Schools can refer parents to their children's health care providers for blood lead testing of young children (6 months through 72 months of age) or to their local health department to learn what local lead poisoning prevention activities may be underway. Children in low income families may be eligible for free health exams and blood lead tests through the local Child Health and Disability Prevention program. Further, most health maintenance organizations and health insurance policies provide lead testing as part of preventive care for children. Because not all health care providers suggest that children have the blood test for lead, parents may specifically have to request it for their young children.

School personnel who believe there is a lead hazard in their schools or who wish more specific information or technical advice may wish to contact their local health department, environmental health agency, or the Department of Health Services Childhood Lead Poisoning Prevention Branch lead hotline at (510) 450-2424. Written materials about lead poisoning prevention may

be available from the local health department and can be obtained by calling the EPA national hotline (1 800-LEAD-FYI).

## WHAT IS BEING DONE ABOUT CHILDHOOD LEAD POISONING?

California is taking aggressive action in the prevention of childhood lead poisoning. A comprehensive system utilizing both state and local agencies is in place now to ensure that children identified with elevated blood lead levels receive appropriate medical treatment, that the sources of lead in their environments are identified, and that their parents are informed of ways to prevent further exposure. The Department of Health Services has developed educational resources, including trainings for pubic health staff, the medical community, and advocacy groups, as well as informational literature about childhood lead poisoning prevention. (Copies of three fact sheets produced by the Department are enclosed and may be reproduced for use by schools.) Work is underway to develop new information on the safest and most cost-effective ways to reduce lead hazards from paint and soil, and regulations are being promulgated to assure a well trained and certified abatement workforce.

All these activities are aimed at early detection and intervention and, most important, prevention of childhood lead poisoning. Studies of the effects of lead poisoning are conclusive: even low levels of exposure can compromise children's neurological and cognitive development. School and health officials have an opportunity to form an alliance against this insidious threat to children's attainment of their full intellectual potential.

As more information becomes available about the extent of lead in schools, preschools, and child care facilities and as additional resources are developed, the Departments of Health Services and Education will offer additional recommendations and specific prevention suggestions. In the meantime, it is of special concern to the public health and educational communities in California that we take a cautious and rational approach to protecting the children in our public elementary schools, child care centers, and preschools from exposure to lead.

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California Department of Education

# Enclosures

cc: Local Health Officers Local Environmental Health Directors Local Directors of Maternal, Child, and Adolescent Health CHDP Directors